

AllnGaP LED DICE

Part NO.: AOC-X14RXM-Au Series

PRELIMINARY

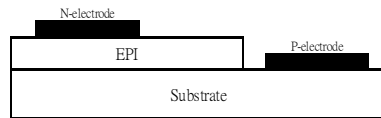
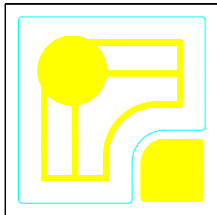
Features

- Red color emission
- Excellent performance and high efficiency
- Great reliability even in harsh environment
- Mirror reflector to increase efficiency

Description

AOC-X14RXM Series is a red color emitting AllnGaP LED grown by MOCVD technique. Its structure enables enhanced quantum efficiency; the mirror reflector greatly increases the light extraction efficiency and therefore a greater light intensity. This device is designed for ultra-high brightness (UHB) automobile, display, and consumer electronic applications.

Chip Dimensions



Chip Size : 330 μm \times 330 μm \pm 25 μm

Bonding Pad : ϕ 102 μm \pm 10 μm

Chip Thickness : 105 μm \pm 10 μm

Electrical and Optics Characteristics

Measuring Item	Symbol	Condition	Min	Typ.	Max	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	1.75	-	2.40	V
Reverse Current	I_R	$V_R=5\text{V}$	-	-	1.0	μA
Dominant Wavelength	λ_d	$I_F=20\text{mA}$	615	-	630	nm
Max. Junction Temperature	T_{max}	-	< 120			$^{\circ}\text{C}$
Max. DC forward current	I_f	$T_a = 25^{\circ}\text{C}$	< 70			mA
Max. pulse forward current (Pulse width 0.1 msec, frequency=1 kHz.)	I_{fm}	$T_a = 25^{\circ}\text{C}$	< 140			mA
Storage temperature	T_{stg}	Chip on tape	0 ~ 40			$^{\circ}\text{C}$
		Only chip	-40 ~ 80			

Available Dominate Wavelength and Iv Matrix

Wavelength Range	≥ 460 mcd	≥ 520 mcd	≥ 600 mcd	≥ 700 mcd
615 ~ 625 nm	-	Y52	Y60	Y70
620 ~ 630 nm	-	Y52	Y60	Y70

Note:

1. All measurements are done with AOC's standard testing equipment.
2. Luminance intensity is measured on bare chip.
3. Above contents are subject to change without notice.
4. Special requests are also welcome, please contact AOC's sale representative for any request.
5. Characteristics curves are measured within TO-46 package